REMARKS

Reconsideration of this application is respectfully requested.

Applicants confirm the election of Group 1, claims 1-16. This election is made without traverse.

Claims 1-32 were pending. Claims 17-32 were withdrawn from consideration by the examiner. Claims 1-16 were rejected. Claims 1-8 are canceled. Claims 33 and 34 are added.

Claims 1 and 7 were rejected under 35 U.S.C. § 102 as being anticipated by Paulus (5,626,774). This rejection is obviated by cancellation of claims 1 and 7.

Claims 1-5 and 9-13 were rejected under 35 U.S.C. § 103 as being unpatentable over Tsukada et al (US 2001/0002728A1) in view of Gross et al. (6,756,563). Claims 6-8 were rejected under 35 U.S.C. § 103 as being unpatentable over Tsukada et al (US 2001/0002728A1) in view of Gross et al. (6,756,563) and Paulus.

Claim 8 has been amended to recite:

> testing the circuit trace;
> determining that the tested circuit trace contains a defect;
> removing the solder mask from the printed circuit board using an ultra violet laser after the determining step, to expose the circuit trace without damaging the circuit trace; and
> performing failure analysis on the circuit trace of the printed circuit board, thereby determining a cause of the defect.

According to claim 1, the circuit trace is tested, and a determination is made that the circuit trace contains a detect, before removing the solder mask. Then the solder mask is removed after the determining step and the failure analysis is performed thereby to determine a cause of the defect. Support for the amendment to claim 9 is set forth in paragraphs [0022] to [0024] and [0027]. No new matter is added.

The combined teachings of Tsukada et al., Gross et al. and Paulus neither disclose nor suggest this combination of features. Tsukada et al. remove a portion of the solder mask, and then subsequently perform electrical testing. There is no suggestion that they remove the solder mask after determining the existence of a defect to allow subsequent failure analysis and subsequently determining the cause of the defect.

Gross et al. and Paulus fail to cure the deficiencies of Tsukada et al. with respect to the features of claim 9. Therefore, claim 9 should be patentable over the prior art of record.

Claims 10-16, 33 and 34 are dependent on claim 9, and should be patentable for at least the same reasons.

Claims 33 and 34 are added to better cover the invention. Claims 33 and 34 cover two different types of failure analysis that are neither disclosed nor suggested by the prior art of record. Therefore, claims 33 and 34 should be separately patentable.

The Examiner crossed out 4 references on the form PTO-1449. Enclosed herewith is a new IDS citing three of the four references with publication dates. In place of the fourth reference, "Light Age, Inc.", U.S. Patent 6,876,689 is cited, which discloses the pertinent subject matter. Consideration of the cited reference is respectfully requested.

In view of the foregoing amendments and remarks, Applicant submits that this application is in condition for allowance. Early notification to that effect is respectfully requested.

The Assistant Commissioner for Patents is hereby authorized to charge any additional fees or credit any excess payment that may be associated with this communication to deposit account **04-1679.**

Respectfully submitted,

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